



State of Idaho  
DEPARTMENT OF WATER RESOURCES

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GOVERNOR

R. KEITH HIGGINSON  
DIRECTOR

August 5, 1993

Big Lost Irrigation District  
P.O. Box 205  
Mackay, ID 83251

Dear Rita and Directors:

At the request of Rick Reynolds I have compared reservoir evaporation estimates and stored water river conveyance loss estimates with 28% of a full reservoir (44500 acre feet was used as the volume of the reservoir measured at the spillway crest). The enclosed plot illustrates the comparison. Data begins on July 8, 1993 which was the most recent fill. Reservoir contents on 7/8/93 equaled 44533 acre feet.

There are four data curves on the plot. The uppermost curve represents the volume of 12460 acre feet. This is 28% of 44500 acre feet. If my understanding is correct this is the amount which is set aside to cover evaporative and river conveyance losses for stored water with a full reservoir, leaving 32040 acre feet to be allocated to users. The bottom curve (identified as "CUM EVAP VOL") is the cumulative evaporation volume estimate. For the period 7/8 thru 7/31 total evaporation equals 447.52 acre feet. The next curve up, (identified as "CUM STO LOSS VOL") is the cumulative river conveyance loss assessed to stored water. For the period 7/8 thru 7/31 the total stored water river conveyance loss equals 1884.33 acre feet. The final curve (identified as "TOTAL STO LOSS VOL") is the sum of the cumulative evaporation and river loss estimates. For the period 7/8 thru 7/31 the sum is equal to 2331.85 acre feet.

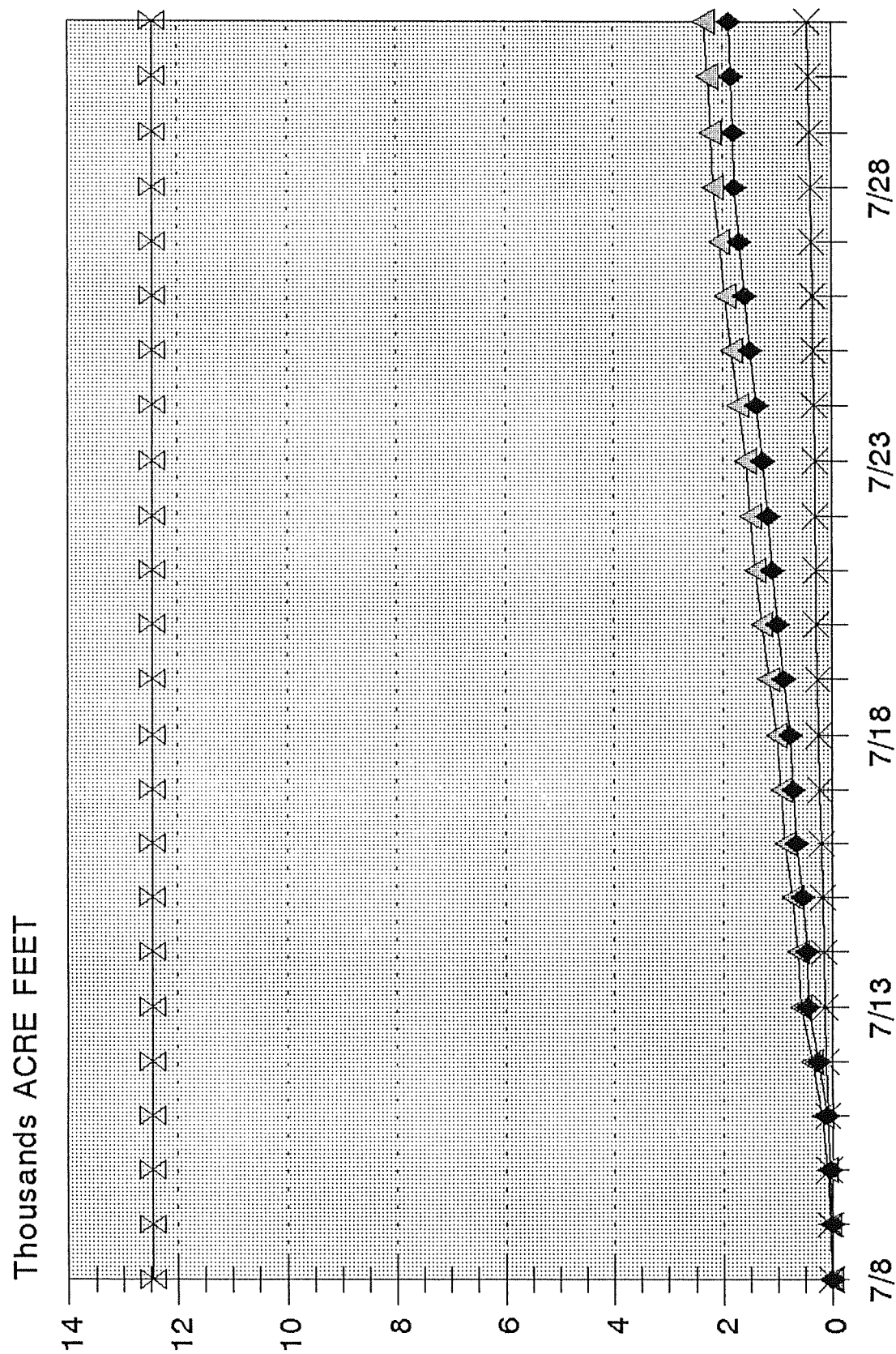
Up until 8/1 natural flow has been absorbing the evaporation loss in the reservoir. From 8/1 thru the remainder of the season stored water shall be assessed the water lost to evaporation in the reservoir.

Feel free to contact me if you have any questions. I would be happy to provide updates periodically, once a month should be adequate.

Sincerely

George Austiguy EIT  
Water Management Division  
327-7897

STORED WATER LOSS ESTIMATES FOR THE BIG LOST BASIN BELOW THE MACKAY RESERVOIR  
1993



X CUM EVAP VOL ◆ CUM STO LOSS VOL ▲ TOTAL STO LOSS VOL X 28%(44500)